

In the Claims:

Cancel Claims 1-14 and add the following new Claims 15-47.

- Emb  
DS
- 1 15. (New) A system for using a shared key to transmit secure data  
2 between a client and a server, the system comprising:  
3 an encrypt/decrypt engine for using the shared key to encrypt  
4 or decrypt data, the encrypt/decrypt engine being  
5 configured for delivery via a web page to a client in  
6 response to a user request and further configured to  
7 encrypt data independently of an identity of the client;  
8 wherein the server includes a user private keys database  
9 configured to store the shared key.
- 1 16. (New) The system of claim 15 wherein the shared key is a user's  
2 private key entered by a user into the web page.
- 1 17. (New) The system of claim 15 further comprising a secure data  
2 database configured to store data received from the client and,  
3 upon the completion of a processing step, to deliver the stored  
4 data in an encrypted format to the client or to another client.
- 1 18. (New) The system of claim 15 further comprising a secure data  
2 database configured to store data received from the client and,  
3 upon receipt of a request for the data, to deliver the stored data  
4 in an encrypted format to the client or to another client.

1 19. (New) The system of claim 15 wherein the shared key is  
2 transmitted between the server and the client as few as zero  
3 times and the shared key is transmitted between the server and  
4 the user as few as one time.

1 20. (New) The system of claim 15 wherein the shared key is a user's  
2 private key entered by a user.

1 21. (New) The system of claim 15 wherein the client encrypt/decrypt  
2 engine is installed on the client.

1 22. (New) A system for using a shared key in transmitting secure  
2 data between a client and a server, the system comprising:  
3 an encrypt/decrypt engine for using the shared key in  
4 encrypting data, the encrypt/decrypt engine being  
5 configured to encrypt data independently of an identity of  
6 the client; and  
7 a user private keys database located on the server and  
8 configured to store the shared key, the shared key being  
9 the private key of a user.

1 23. (New) The system of claim 22 wherein the server is configured to  
2 decrypt encrypted data received from the client using the shared  
3 key and to use a private server key to re-encrypt the decrypted  
4 data.

1 24. (New) The system of claim 23 further comprising a secure data  
2 database configured to store the encrypted data received from  
3 the client and re-encrypted by the server and to deliver the  
4 stored data to the client or to another client; the delivered data,  
5 after the completion of a processing step, being encrypted with  
6 the shared key or with another shared key.

AS  
can't

1 25. (New) The system of claim 23 further comprising a secure data  
2 database configured to store the encrypted data received from  
3 the client and re-encrypted by the server and to deliver the  
4 stored data to the client or to another client; the delivered data  
5 being, upon receipt of a request for the data, encrypted with the  
6 shared key or with another shared key.

1 26. (New) The system of claim 25 wherein the request is from the  
2 user.

1 27. (New) The system of claim 25 wherein the request is from an  
2 other user.

AB  
can't

1 /28. (New) A system for using a shared key in transmitting secure  
2 data between a client and a server, the system comprising:  
3 an encrypt/decrypt engine for using the shared key entered by a  
4 user to encrypt data entered by the user, the  
5 encrypt/decrypt engine being configured such that all  
6 data entered by the user and stored on the client is stored  
7 in encrypted form, and further configured to encrypt data  
8 independently of an identity of the client;  
9 the server including a user private keys database configured to  
10 store the shared key, the shared key being a private key of  
11 a user; and  
12 the client.

1 29. (New) The system of claim 28, wherein the encrypt/decrypt  
2 engine uses a symmetric key encryption/decryption algorithm  
3 for encrypting and decrypting data.

1 30. (New) The system of claim 28, further including a web server  
2 engine configured for the user to securely send or receive data  
3 from the client to the server.

1 / 31. (New) A method for using a shared key in receiving secure data  
2 on a server, comprising the steps of:  
3 delivering from a server to a client a web page including an  
4 encrypt/decrypt engine;  
5 encrypting data on the client using the encrypt/decrypt engine  
6 and a shared key entered by a user of the client, the  
7 shared key being shared between the user and the server;  
8 delivering the encrypted data from the client to the server;  
9 receiving the encrypted data at the server;  
10 decrypting the encrypted data at the server using the shared  
11 key; and  
12 processing the decrypted data.

1 32. (New) The method of claim 31, wherein the step of processing the  
2 decrypted data includes the steps of:  
3 encrypting the decrypted data with a private server key; and  
4 storing the encrypted data in a database.

1 33. (New) The method of claim 31, wherein the step of processing the  
2 decrypted data includes the steps of:  
3 re-encrypting the data with an other user's private key shared  
4 between the other user and the server; and  
5 sending the re-encrypted data to the other user.

1 34. (New) The method of claim 31, wherein the step of processing the  
2 decrypted data includes the steps of:  
3 decrypting the encrypted data with the private server key;  
4 re-encrypting the data with a second user's key shared between  
5 the second user and the server; and  
6 sending the re-encrypted data to the second user.

1 35. (New) The method of claim 31, wherein the step of processing the  
2 decrypted data includes the steps of:  
3 processing the data according to an instruction of the user;  
4 re-encrypting the processed data using the user's shared key;  
5 and  
6 sending the re-encrypted processed data to the user.

1 36. (New) The method of claim 31, wherein the step of processing the  
2 decrypted data includes storing the decrypted data in a secure  
3 database.

1 / 37. (New) A computer-readable medium comprising program  
2 instructions for causing a computer system to use a shared key  
3 in receiving secure data at a server, by the steps of:  
4 delivering a web page from the server to a client, the web page  
5 including an encrypt/decrypt engine and being configured  
6 to use the encrypt/decrypt engine and a shared key  
7 entered by a user of the client to encrypt data on the  
8 client, the shared key being shared between the user and  
9 the server;  
10 receiving the encrypted data at the server;  
11 decrypting the encrypted data using the shared key; and  
12 processing the decrypted data.

1 / 38. (New) A computer-readable medium comprising program  
2 instructions for causing a computer system to receive secure  
3 data on a server using a shared key, by the steps of:  
4 delivering a encrypt/decrypt engine from the server to a client,  
5 the encrypt/decrypt engine being configured to use a  
6 shared key entered by a user of the client to encrypt data  
7 on the client, the shared key being shared between the  
8 user and the server and the encryption being independent  
9 of an identity of the client;  
10 receiving the encrypted data at the server;  
11 decrypting the encrypted data using the shared key; and  
12 processing the decrypted data.

1 39. (New) The computer readable medium of claim 38, further  
2 comprising program instructions for causing the processed  
3 decrypted data to be re-encrypted using a private server key.

1 40. (New) The computer-readable medium of claim 39, further  
2 comprising program instructions for causing the processed  
3 decrypted data to be stored in a secure database.

1 41. (New) The computer-readable medium of claim 38, wherein  
2 processing the decrypted data includes the steps of:  
3 re-encrypting the data with the private server key;  
4 storing the re-encrypted data;  
5 decrypting the stored data with the private server key;  
6 encrypting the data with a second user's key shared between  
7 the second user and the server; and  
8 sending the encrypted data to the second user.

1 42. (New) The computer-readable medium of claim 38, wherein  
2 processing the decrypted data includes the steps of:  
3 processing the data according to an instruction of the user;  
4 encrypting the processed data using a shared key; and  
5 sending the encrypted processed data to the user or to another  
6 user.



1 43. (New) A method of using a shared key in transmitting secure data  
2 between a client and a server using a shared key, comprising  
3 the steps of:  
4 encrypting data using the shared key with an encrypt/decrypt  
5 engine configured to encrypt data independently of an  
6 identity of the client, the shared key being entered by a  
7 user of the client;  
8 delivering the encrypted data from the client to the server;  
9 receiving the encrypted data at the server;  
10 decrypting the encrypted data at the server using the shared  
11 key, the shared key being stored in a user private keys  
12 database; and  
13 processing the decrypted data.

1 44. (New) The method of claim 42, wherein processing the decrypted  
2 data includes the steps of:  
3 encrypting the decrypted data with a private server key; and  
4 storing the encrypted data in a database.

1 45. (New) The method of claim 42, wherein the step of processing the  
2 decrypted data includes the steps of:  
3 encrypting the data with an other user's private key shared  
4 between the other user and the server; and  
5 sending the encrypted data to the other user.

1 46. (New) The method of claim 42, wherein the step of processing the  
2 decrypted data includes the steps of:  
3 decrypting the re-encrypted data with the private server key;  
4 encrypting the data with a second user's key shared between  
5 the second user and the server; and  
6 sending the encrypted data to the second user.

1 47. (New) The method of claim 42, wherein the step of processing the  
2 decrypted data includes the steps of:  
3 processing the data according to an instruction of the user;  
4 re-encrypting the processed data using the user's shared key;  
5 and  
6 sending the re-encrypted processed data to the user.